Evacuation Planning

for Businesses

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EVACUATION DRILL/FIRE DRILL

Recommendations for Large Commercial Structures

Sacramento Metropolitan Fire District
Community Services Division
2101 Hurley Wy. Sacramento, CA 95825-3208
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THE EMERGENCY MANUAL

In developing an evacuation/fire drill process, effort should be made to keep material factual, basic, and as simple as possible. Emphasis should be placed on special procedures for all individuals in the building. The most important duties concern NOTIFICATION, COMMUNICATIONS AND EVACUATION.

This sample drill procedure contains necessary information that should be part of your EMERGENCY MANUAL (the emergency manual identifies steps in all emergency situations: intruder, flooding, loss of electricity, fire, injuries, earthquake, tornado/hurricane/storm, etc.). Make sure to provide a copy of your manual to all staff.

Generally, the fire drill procedures in your emergency manual will require only a few pages. Information should include basic emergency procedures, special duties for staff, a color-coded evacuation floor plan of the building (in all open areas and should be placed on the wall where staff/visitors will normally see it each day), an emergency phone number list, and a employee roster (which at least one employee should be responsible to take with them during an evacuation).

Additional information should include fire alarm devices and other equipment and information: who has first-aid training/CPR training, fire prevention practices to be reinforced (i.e. crawling when smoke is present, fire extinguisher use, closing doors as you evacuate), logs of training dates and when evacuation drills occur.

BASIC FIRE EMERGENCY PROCEDURES

1) LIFE: Evacuate all persons from the building.

2) CONTAINMENT: Keep fire/smoke from spreading by closing doors as you evacuate.

3) ALARM: Sound the building's alarm upon discovering a fire. Also designate an individual who will have the task of calling call 9-1-1.

4) EXTINGUISH: Use portable fire equipment…but only if safe to do so.

5) EVACUATION: Evacuate occupants no matter how small the fire. (Remove them to a pre-arranged SAFE REFUGE AREA/MEETING PLACE, which would be at least 50 feet from the building and based upon an area of not less than 3 square feet per occupant.) Make a "head count" with the use of the employee list. Report missing persons to an assigned person who will report the information to a fire officer.

COMMUNICATIONS ARE VITAL

ALWAYS POST EMERGENCY TELEPHONE NUMBERS AND THE FACILITY ADDRESS IN A CONSPICUOUS PLACE. Know ahead of time which communications equipment will be used to call 9-1-1 and alert others in the building. Know what devices (building telephone, portable phone, short-wave radio equipment, P.A. equipment, audible alarm) will be used to notify the entire facility and call 9-1-1. A "code word" may be used on P.A. systems to designate various types of emergencies, (i.e. intruder situations).

EMERGENCY PROCEDURES FOR STAFF

Duties and instructions for ALL personnel/volunteers within the facility should be outlined. NEVER give an excess number of duties to one person. Utilize the personnel to your best advantage, with emphasis on evacuation of occupants, sounding the alarm, and efforts to extinguish the fire.

Procedures should be kept as simple as possible and provide specific instructions for office help, dietary and maintenance people who may operate specialized machinery.

WHAT YOUR PROCEDURES SHOULD COVER

1. WHO will make the initial call for help? HOW will this be done?
2. WHAT method will be used to transmit the alarm to the entire facility?
3. WHO will meet the proper authorities? WHERE?
4. WHAT methods will be used to assure that all persons are accounted for?
5. WHAT area (outside the building) will be used as a MEETING PLACE?
6. WHO will be in charge of (using and/or transporting) FIRST AID equipment?
7. WHAT records, cash, or other belongings will be removed from the building?
8. HOW will records, cash or other belonging be removed from the building?
9. WHO will attempt to extinguish fires?

Monitoring Fire Drills for
Large Commercial Structures

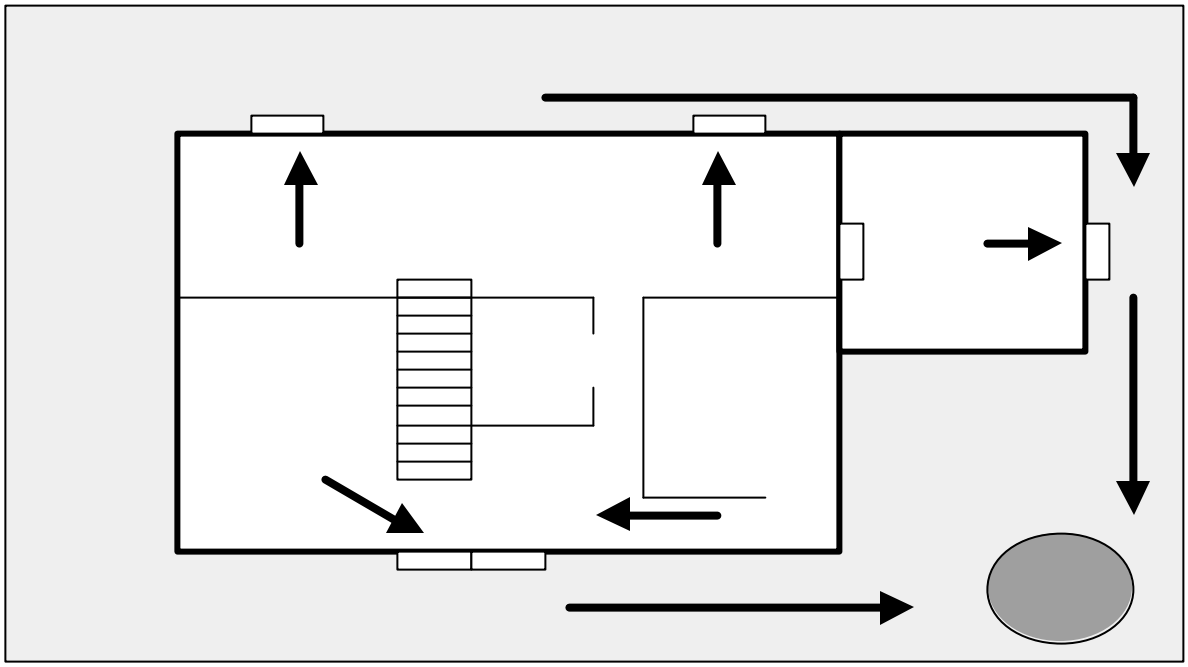
Recommendations from the Sacramento Metropolitan Fire District

Fire drill monitors should be selected prior to the fire drill and stationed at strategic locations throughout the building to observe the actions of personnel when the alarm is sounded. (Some drills may start with a simulated electronic detection of a fire or a simulation of an employee finding a fire.)

The below items should be checked before and during a fire drill:

1. Evacuation routes and floor plans (before the drill begins) – Routes should be predetermined, with alternate routes. Floor plans should show all floor exits, plus an emphasized evacuation route to the nearest exit from where the floor plan is located. The floor plan should be placed in every separate area of the building and in areas employees and visitors commonly view or read information. Check for the following before the fire drill:

    a. Are all exit ways clear of obstacles?
    b. Remind second floor and above occupants not to use elevators when evacuating.
    c. Are floor plans located in each area (lobby, administration, dining areas, main corridors, etc.)?
    d. What procedures have been established for assisting occupants/customers during the evacuation?
    e. Has an employee(s) been designated as a first aid responder and has a first aid kit been designated to be taken to the meeting place at the time of evacuation?



2. The discovery of the fire – Check with those planning the fire drill to see what procedure they wish to use to start the fire drill. If the electronic fire alarm is to be used, make sure the monitoring company has been notified to the fire drill. A second way to start the drill is have a fire monitor pick an employee at random. Present a fire problem to the employee. Explain that he or she is to handle the discovery of the fire as if it were an actual fire with some actions to be simulated.

   The fire monitor will observe this person simulating the following:

   a) Checks the fire area and removing anyone from danger.
   b) Closes the door to the room, if possible, to confine the fire.
   c) Sounds the alarm by using one or both of the following
      i. Fire alarm
      ii. Telephone
      iii. Public address (intercom system not linked to phone lines)

3. Response to fire – Evacuation (check to see if the following occurred throughout the facility):

   a) Designated person simulates 9-1-1 call when alarm system is not linked to a monitoring company.
   b) Staff available to assist those with special needs.
   c) Public bathrooms checked for occupants.
   d) Doors closed as last person leaves from each room.
   e) Staff assists lobby visitors to safe meeting place?
   f) Staff carries out list of employees/residents/students and roll call is taken at the meeting place and names of missing passed on to person meeting the fire district?
   g) Was there a simulated turn off of electricity/gas done?
   h) Was there a simulated turn off of machines/appliances within the employees reach at the time the alarm sounded?
   i) Does the business have a set procedure for the protection of ledgers, charts, files, and money?
   j) Are meeting places located in safe areas at least 50 feet from the building?
   k) Was a staff member available at front of facility to meet the fire district?
   l) Any other situations that comes to the attention of the fire monitor.

Discuss your findings with employees/residents/students/owners, and discuss how to improve evacuation procedures for the organization.

Evacuation Planning for Americans with Disabilities
In the Work Place

By obtaining basic information from your local fire agency options can be discussed and a decision on the best approach to providing for the employee's needs may be made. This discussion is a crucial step because each person's capabilities and limitations are unique; thus plans must be designed to meet the needs of the individual to be most effective.

People with mobility problems must be identified so they can be included in developing the escape methods they will use and the employer can see that an effective evacuation plan will be devised. The employee's participation in developing the evacuation plan is a confidence-building step that improves the correct completion of any evacuation.

It will also be important to identify employees with special needs who may not consider themselves disabled (i.e. asthma, emphysema, other respiratory conditions, pregnancy, those with mental impairments or traumatic injuries: broken bones, sprained appendages). Those with special needs may perform well in a drill but then experience problems with the hazards of a real emergency.

Once those needing special assistance and/or accommodation have been identified, their specific limitations documented and what best assistance can be provided, the agency must choose the methods and items and devise a plan. Your agency should investigate the types and costs of emergency exiting devices, both portable and permanent: installed systems such as chair- or wheelchair-lifts designed to go down special tracks along stairs or stair-climbing chairs.

DETECTION SYSTEMS

If manual pull stations are the notification devices for fire, facility managers should also consider that not all people possess the strength and/or dexterity to operate them. The pull stations should be within 48-54" from the ground to be within reach of the person in the wheelchair.

In studies conducted by the U. S. Consumer Product Safety Commission fire sprinklered buildings have not had a multiple fire death since their inception (outside of arson cases where the sprinkler system was purposefully disconnected). Properly designed and maintained fire sprinkler systems eliminate the life threat to building occupants regardless of their individual abilities and can provide superior protection for people with disabilities by slowing smoke travel and decreasing the air temperature that the fire has heated allowing for slower escape times.

WARNING SYSTEMS

Employee notification to evacuate is to be performed in an auditory and visual format if any disability encompasses hearing impairment. Strategies to provide equitable notification are TV, monitors or scrolling text signs located throughout the building; tactile/vibratory pagers; audible directional instructions; or other devices using light, vibrations or air movement.

EVACUATION PROCEDURES

The purpose of evacuation is to relocate people from dangerous areas to safe areas (sometimes called refuge areas or meeting places). All evacuation plans must have designated safe areas. Safe areas are usually located outside of the building and must be 50 feet from any building. When safe areas occur inside the building, they are called areas of rescue assistance. These areas may only occur where there is the same protection in fire-rated walls as the stairway.

If areas of rescue assistance are to be used, a sign stating this is the "Area Of Rescue Assistance" must be posted, a communication device must be installed in the area of rescue assistance, along with instructions on how to use it and in the corridor outside of the area of rescue assistance "exit" and "area of rescue assistance" signs must be posted. All evacuation plans posted in the building must show the closest area of rescue assistance.

EVACUATION DRILLS

Training for fire or evacuation drills begins when the evacuation plan is introduced to the employees. During employee orientation is the best time to introduce the plan. Periodic safety meetings should encompass the lecture, demonstration and practice of the evacuation plan.

The practice of the plan is typically called a fire drill. There are three types of fire drills: A Walk through drill, an announced drill or a surprise drill.

A walk through drill allows the practice of separate parts of an evacuation plan, and allows very specific, in-depth training to occur. Those complex parts of the evacuation plan or individuals needing more extensive practice benefit from this type of drill with the ability to repeat or slow down procedural steps.

An announced drill is a training drill like the walk through. This drill will identify important communication links and coordinating activities that may need to be included or improved.

Surprise Drills are the most infrequently used of the three types. This drill is strictly for evaluation purposes, and should not occur until several walk through drills and/or at least one announced drill has already taken place during the year. For validity during the evaluation process, surprise drills should involve some realistic elements (e.g. blocked exits).

Evacuation drills should occur seasonally or at least twice a year. All employees should be familiar with the components of the evacuation plan since any one employee may not be able to complete their designated assignment during an evacuation and another must be able to take their place.

TRAINING HANDOUTS

Developing evacuation plans for the disabled provides an identified employee action plan, assistance for evacuees, and rescue techniques that will provide for reachable safe areas for all employees, and time-saving data ready for use by fire or emergency agencies. Enclosed are copiable handouts to enrich your training sessions.

Fire Drill Checklist

Site_____ **Date**_____ **Time**_____

Contact Person_____ **Drill Coordinator**_____

Monitoring Company Notified?_____

Special Requirements_____

Maintenance Staff Present?_____

Location of Activated Alarm Panel_____

Alarm Panel Functioned?_____

Start Time of Drill_____

End Time of Drill_____

Length of Drill_____

Devices Not Functioning (type and location)_____

Was Evacuation Orderly?
_____

Comments_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Fire Drill Safety Checklist

Date of Drill: _____

_____ Floor plan shows all floor exits.

_____ Nearest exit is emphasized on floor plan.

_____ All exits clear of obstacles.

_____ Floor plans found in all areas of building.

_____ Special needs clients/employees identified for assistance.

_____ Employee designated as first aid response.

_____ Upon fire discovery was door closed to fire.

_____ Upon fire discovery was alarm sounded.

_____ Upon fire discovery were people removed from danger.

_____ Public bathrooms checked for occupants.

_____ Doors closed as last person leaves.

_____ Roll listing all employees taken out to meeting place.

_____ Simulated turn off of electricity/gas or someone on premises that can show fire personnel where utility turn-offs are located.

_____ Simulated turn off of machines/appliances.

_____ File, ledger, money, etc. protection provided.

_____ Meeting places and evacuation paths located at least 50 feet away from all buildings, fire hydrants, utilities, and driveway/sidewalk areas where emergency vehicles will enter premises or park.

_____ Staff available at front to meet fire district to answer questions and provide information.

_____ Other unsafe conditions: _____

California Earthquake Preparedness
BUSINESS PLANNER

Earthquakes strike suddenly and destructively and can kill or injure your employees, damage structures and equipment and interrupt or terminate business operations.

Yet, injuries and damage can be reduced or avoided entirely if appropriate preparedness measures are taken. An effective emergency preparedness plan can keep your business in business after a quake.

Here are a few steps prudent businesses can take in April and all through the year:

- Prepare or update your company disaster plan. A good disaster plan addresses the following areas:
    - Employee safety and basic survival
    - Emergency operating procedures
    - Emergency financial procedures
    - Procedures for handling data processing systems
    - Procedures for storing, securing and retrieving vital records
    - Emergency communications systems
    - Emergency transportation systems
    - Alternative office facilities
    - Methods for networking with federal, state and local emergency services agencies and organizations, and
    - Ongoing training, testing and maintenance (For help, contact your city or county Office of Emergency Services.)

- Consult local building codes to ensure that your building meets current seismic safety standards.

- Conduct drills to ensure that your company's earthquake plan is effective. Revise plan as necessary.

- If your business is in a high-rise building, educate your employees about what to expect during an earthquake. Lower floors will shake rapidly during a major earthquake, much like low-rise buildings. On upper floors, movement will be slower, but the building will move farther from side to side.

- Secure and anchor equipment and furniture, including bookshelves, cabinets, computers and typewriters.

- Hold workshops or host "brown bag" seminars during the lunch hour on earthquake preparedness topics, such as safety techniques, first aid and CPR, evacuation and damage assessment.

- Practice reacting to possible disaster scenarios.

- Include articles on the importance of workplace and home preparedness in employee newsletters.

- Prepare special bulletins and handouts for employees on preparing at work and at home.

- Develop a business recovery plan on how to restore your business after a quake.

- Conduct a "hazard hunt" to find potential dangers in your business setting.

- Obtain agreements with vendors and customers for post-earthquake operations.

- Develop an inventory of critical supplies and equipment.

EARTHQUAKE – DUCK, COVER & HOLD TIPS

When you feel an earthquake, DUCK under a desk or sturdy table. Stay away from windows, bookcases, file cabinets, heavy mirrors, hanging plants and other heavy objects that could fall. Watch out for falling plaster or ceiling tiles. Stay under COVER until the shaking stops. HOLD onto the desk or table. If it moves*, move with it*. Here are some additional tips for specific locations.

- If you're in a **HIGH-RISE BUILDING**, and you are not near a desk or table, move against an interior wall, and protect your head with your arms. Do not use the elevators. Do not be surprised if the fire alarm or sprinkler systems come on.

- If you're **OUTDOORS**, move to a clear area, away from trees, signs, buildings, or downed electrical wires and poles.

- If you're on a **SIDEWALK NEAR BUILDINGS**, duck into a doorway to protect yourself from falling bricks, glass, plaster and other debris.

- If you're **DRIVING**, pull over to the side of the road and stop. Avoid overpasses, power lines, and other hazards. Stay inside the vehicle until the shaking is over.

- If you're in a **CROWDED STORE OR OTHER PUBLIC PLACE**, do not rush for exits. Move away from display shelves containing objects that could fall.

- If you're in a **WHEELCHAIR**, stay in it. Move to cover, if possible, lock your wheels, and protect your head with your arms.

- If you're in the **KITCHEN**, move away from the refrigerator, stove, and overhead cupboards. [Take time NOW to anchor appliances and install security latches on cupboard doors to reduce hazards.]

- If you're in a **STADIUM OR THEATER**, stay in your seat and protect your head with our arms. Do NOT try to leave until the shaking is over. Then leave in a calm, orderly manner.

AFTER AN EARTHQUAKE, BE PREPARED FOR AFTERSHOCKS, AND PLAN WHERE YOU WILL TAKE COVER WHEN THEY OCCUR.

EMERGENCY TRANSPORT-SAFELY

When fire or another emergency dictates quick removal of patients, and they can't be transported via their beds, stretchers, or the OR table, the appropriate carry or support technique will save them, and you, unnecessary injury.

Although you may assistance (the "Swing" and "Extremity" carries can then be used), it's conceivable that you might have to use one of the three one-person carries for non-ambulatory patients, as illustrated below.

ONE-PERSON CARRIES

HIP CARRY

1. Put patient's arm over your back and slide your arm under patient's back

2. Lean backward, into patient's abdomen, and grip patient behind his knees.

3. Hold patient snugly against your back, then lean forward to carry.

4. Lean patient against wall, and slide to floor as you drop to one knee.

PACK STRAP CARRY

1. Cross patient's arms and grab both wrists.

2. Pull up as you turn to step under patient's arms, cross his arms in front.

3. Lean forward, and step to the head of the bed, patient will roll out, onto your back.

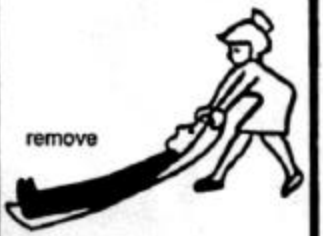
4. Lean patient against wall and slide to floor as you drop to one knee.

CRADLE DROP

1. Place blanket on floor next to bed, then grip patient under shoulders and knees.

2. Slide patient to edge of bed

3. On one knee, lower his legs then his body, to blanket, or on both knees, slide patient down your chest to blanket.



4. Pull patient out, head first, on blanket.

TWO-PERSON CARRIES

SWING

1. Each nurse grasps the other's shoulder with one hand, as patient places his arms around both of their shoulders.

2. Reaching under patient, each nurse grasps the other's wrists.

EXTREMITY

1. Patient must be sitting on the edge of the bed.

2. One nurse hugs patient from behind, grasping her own wrist.

3. The other nurse stands between patient's legs, and lifts him from behind his knees.

SEMI-AMBULATORY

1. Stand next to patient, and place one of his arms around your waist.

2. Reach behind and around patient's waist and grasp his other arm.

3. "Hug from behind" and walk in step, grasping your wrist.

Sample of an Emergency Planning
Floor # _____ & Wing _____

Print Name: _____
Business: _____
Address: _____
_____
Emergency Plan #_____
Cross Street: _____
_____

1) In the area to the right, draw a HALLWAY floor plan of your area of work.

2) Show at least two (2) EXIT routes from your work location.

3) Show all STAIRWELLS and identify them with (RA) for Roof Access, or (NRA) for No Roof Access.

4) Use the KEY symbols below to identify Fire Equipment & Emergency Shut-Offs as they apply to your floor plan.

Fire Equipment:

Fire Alarm----------(A)
Fire Hose----------(H)
Fire Extinguisher----------(X)
Water---------- -(X) W
Carbondioxide----------(X)CO_2
Dry Chemical----------(X) DC
Halon----------(X) H
Fire Blanket----------(B)
Fire Door----------
Fire Exit Route---------- - - -

Emergency Shut-Offs:

Electrical----------(E)
Gas----------(G)
Water----------(W)
Oxygen----------(O)
NitrusOxide----------(N)
Sprinkler----------(SP)

What telephone number do you dial for fire emergency? _____

What is the page code for a fire emergency? _____

THIS FORM IS PART OF YOUR TRAINING FOR CERTIFICATION, IT MUST BE SUBMITTED TO_____WITHIN FIVE (5) DAYS OF ___/___/___

Basic Information the Fire District Needs About Your Facility

(Supply the applicable information to the first responding unit.)

1. Owner of the facility's name, address & phone number.
2. Building number of floors.
3. Number, type and location of elevators.
4. List the number of interior fire alarms and smoke detectors as well as their locations. If your facility utilizes heat detectors or manual pull stations, list them here as well.
5. List the type of communications system your facility utilizes (Public addresses radio, fire horn, flashing lights, and etc.)
6. Location of standpipe system, sprinkler system, the control valve, and the water flow alarms.
7. List the type of sprinkler system, such as dry or wet, and the locations of water supply, the control valve, and the water flow alarms.
8. Estimate the average number of employees your facility employs during day and evening hours. If you facility is open 7 days per week, take this into account as well.
9. Indicate the number of persons with physical disabilities that work in or visit your facility.
10. List the types and locations of the building's service equipment, such as source of building power, and gas shutoffs.
11. Indicate any hazardous materials stored inside the building or on the site.

EMERGENCY

FIRE – POLICE – MEDICAL

CALL 9 - 1 – 1

OR

EMERGENCY

FIRE – POLICE – MEDICAL
FROM THIS PHONE

CALL 9 + 9 - 1 - 1

The Sacramento Metropolitan Fire District recommends that **9-1-1** stickers be placed on every phone in your business. **9+9-1-1** stickers can also be obtained for businesses that must enter a 9 before calling out.

To receive **9-1-1** or **9+9-1-1** stickers, please call Community Services @ 916.566.4000 with your name, mailing address and type and number of stickers needed.

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